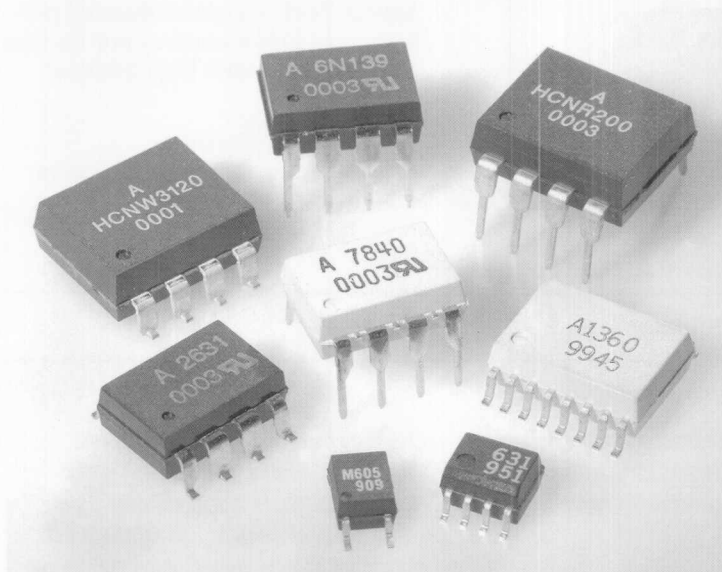


Agilent Technologies Isolation Products



What is the product?

Agilent Technologies offers a broad range of isolation products that provide performance features and benefits that are unmatched in the industry. Optocouplers can be used in an array of isolation applications ranging from power supply and motor control circuits to data communication and digital logic interface circuits.

The primary purpose of an optocoupler is to provide both electrical insulation and signal isolation. The popularity of Agilent Technologies product offering can be accredited to cost-effective innovations in this area.

Why use Optocouplers?

Eliminates effects of electrical noise due to:

- Cross Talk
- Power Glitches/Surges
- Electrical Interference

Provides high voltage isolation allowing:

- Safety/Protection
- Interface between divergent voltages in electrical circuits
- Level Shifting

What are the Key products?

- Digital and Analog Output Optocouplers
- High Speed/High Gain Optocouplers
- Isolated Gate Drivers and IPM Drives
- Smart Current Sensors
- Other Application Specific Optocouplers

Why Agilent Technologies?

- Industry's best isolation technology
- ATM-Design Registration
- Worldwide Safety Approvals, including the highest Maximum Working Insulation Voltage (VIORM) at 1414 V (per VDE)
- Industry's leading CMR performance up to 15 kV/μs
- A broad line of packages
- Lowest power dissipation with input current as low as 40 μA
- High speed digital optocouplers up to 25 MBd
- World's fastest propagation delays as low as 40 ns
- High Quality and Reliability

What are typical markets and applications?

- Industrial – Motor Control, PLCs, Power Converters
- Communications – Telephones, PBX, Modems
- Office Automation – Fax, Desktop PCs, Printers
- Consumer – TV, VCR, Washers/Dryers, Appliances, Air Conditioners
- Automotive – Electric Vehicles, Power Management

What additional information is available?

- Optocoupler Datasheets – Agilent Web site
- Optocoupler Selection Guide – Pub No. 5968-9708E
- Optocoupler Designer's Guide – Pub No. 5968-4800E
- Isolation Circuits Regulatory Guide – 5968-5626E
- SPG CD ROM – 5968-7805E



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Where can I get more information? Who are the key competitors?

Optocouplers:

www.semiconductor.agilent.com/isolator

Agilent home page:

www.agilent.com

Literature Fax Back:

1-800-450-9455

Distribution Technical Support:

1-800-933-4395

DistiNet URL:

www.partners.semiconductor.agilent.com

Agilent Technologies faces competition on standard products only. Other manufacturers do not offer products that compete with Agilent Technologies enhanced performance Optocouplers nor do they offer products with high levels of integration.

Common Competitors:

- Toshiba
- QTC
- Isocom
- Sharp
- Infineon

What are the customer benefits?

Upgrade Value	Feature	Benefit
Improved Isolation/Insulation Ability to protect surrounding circuitry against physical damage resulting from different voltages.	HCNW family offers the highest available working voltage ratings with regulatory approval per VDE 0884 of 1414 V _{peak} . Option 060 (see Selection Guide) now available with 630 V _{peak} .	Meets international safety regulations and standards. Provides better isolation and overall safety performance.
High CMR Common-Mode transient Rejection or signal isolation of data through suppression of noise transients.	Agilent offers guaranteed CMR performance up to 15 KV/ μ s (30 KV/ μ s typical) which is the highest available in the market.	Improves system performance and reliability. More robust system and better data integrity that meet EMI and ESD requirements.
Drive Current, I_f Low drive current, LED or light-emitting diode drive current.	Agilent offers the lowest I _f (up to 40 μ A) devices in the market and broadest HCMOS compatibility.	Eliminates additional LED drive circuitry. Improves system efficiency and reduces power consumption and LED degradation.
Propagation Delay, T_p A performance measure that describes how quickly a logic signal can propagate through the system.	Agilent's High Speed Digital Optocouplers are designed to meet a wide range of applications with T _p as low as 40 ns.	Increases switching efficiency and better overall speed performance.
Surface Mount Device SMD permits higher component densities than DIP.	Smaller package to deliver the same functionality as standard DIP. True surface mount technology and standard footprint.	Lower assembly cost, easier and faster handling, as well as better solderability.



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